LS-3
SOLVENT RECOVERY PRESENTATION

15.02.2025

LS-3 Team

LS-3 SRS SUMMARY REPORT (April-24 to Jan-25)

LS-3 SRS Summary Report (April-24 to Jan-25)			
Fresh Solvent Procured Qty. (KL)			
S. No.	**Duration Period/ Savings**	**Cost (Cr.)**	**Savings Percentage / Cost**
1	Avg. 6 Months Fresh Consumption (Apr-24 to Sep-24)	5..3	
2	Avg. 4 Months Fresh Consumption (Oct-24 to -Jan-25)	3.5	
3	Savings	1.8	20.40%
Fresh & Recovery %			
4	Jan-25 Fresh Consumption Qty. (KL)	619	45%
5	Jan-25 Recovery Consumption Qty. (KL)	750	55%
6	LS-3 SRS Fresh Consumption Qty. (KL) (Apr-24 to Jan-25)	7017	46.73%
7	LS-3 SRS Recovery Consumption (Apr-24 to Jan-25)	8146	53.27%
8	Fractions	1975	14%
Major Solvent Usage Reduction Qty. (KL)			
9	Major Solvents (Toluene, MDC, n-Heptane, CHN & IPA) avg. per batch	11	0.07 Cr.
10	Major Solvents (Toluene, MDC, n-Heptane, CHN & IPA) avg. per month	110	0.77 Cr.
LS-3 SRS JAN-25 month Output			
11	LS-3 Output	465.5	55%
12	LS-2 Output	288	34%
13	Other Units	99.3	12%
	Total Qty. (KL)	852.8	**3.69 Cr.**
LS-3 SRS APRIL-24 to JAN-25 Output			
14	LS-3 Output	4614	66%
15	LS-2 Output	1949	28%
16	Other Units	421	6%
	Total Qty. (KL)	6984	**30.75 Cr.**

FRESH SOLVENTS PROCURED QUANTITY (APRIL-JAN-25)

	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Total	Average
KL	535	859	681	775	803	1017	748	620	293	729	7060	706
Value (Cr.)	3.6	5.53	5.8	5.2	5.2	6.3	4.2	3.7	1.61	4.48	45.62	4.6

	Apr-24 to Sep-24	Oct-24 to Jan-25	Difference	Saving %
Procured Qty. (KL)	4670	2390		
Average (KL)	778	598	180	
Value (Cr)	31.63	13.99		
Average (Cr.)	5.3	3.5	1.8	20.45

SOLVENT WISE FRESH PURCHASE TREND (April-24 to Jan-25)

Fresh Solvent Purchase Trend (Jan-2025)		
Description	**In KL**	**In Cr.**
Methanol	230	0.66
Ethyl Acetate	120	0.85
IPA	68	0.56
MDC	18	0.08
Toluene	101	0.75
Acetone	108	0.7
Cyclo Hexane	35	0.3
Acetonitrile	24	0.27
Others	26	0.31
Total	**730**	**4.48**

Fresh Solvent Purchase Trend (Apr-24 to Jan-25)		
Description	**In KL**	**In Cr.**
Methanol	2,494	6
Ethyl Acetate	1,114	8
IPA	1,129	11
MDC	936	4
Toluene	644	5
Acetone	545	4
Cyclo Hexane	283	3
THF	191	3
Acetonitrile	193	2
N-Heptane	105	2
Others	295	2
Total	**7,928**	**48**

SRS PERFORMANCE (APRIL-24 to JAN-25)

Performance of SRS for the month of Jan'25 from LS-3 (4 Columns)

Solvent	Input Qty. (KL)	RFS Qty. (KL)	RFS M.C (%)	RFS Qty. (KL) (Dry)	Input Qty. (MT)	RFS (MT)	Price per Kg	Value (Lakhs)
Acetone	76.5	52.1	--	52.1	60	41	65	20
Acetonitrile	27	18.1	11	7.1	21	6	115	5
Cyclo Hexane	33.6	20.3	--	20.3	26	16	88	10
Ethyl Acetate	194.6	141.5	--	141.5	175	127	69	66
IPA	142.7	99.1	10	89.1	112	70	88	46
MDC	100.8	95.6	--	95.6	134	127	43	41
Methanol	38	25.9	--	25.9	30	21	27	4
Methanol + Acetone	38.3	29.4	--	29.4	30	23	27	5
n-Heptane	17.5	12.3	--	12.3	12	8	150	9
Toluene	540.1	358.5	--	358.5	468	311	70	163
	1209.1	**852.8**	**21**	**831.8**	**1069**	**749**	**741**	**369**

Performance of SRS for the month of Apr'24 to Jan'25 from LS-3 (4 Columns)

Solvent	Input Qty. (KL)	RFS Qty. (KL)	RFS M.C (%)	RFS Qty. (KL) (Dry)	Input Qty. (MT)	RFS (MT)	Price per Kg	Value (Lakhs)
Acetone	1451.9	944.4	0	944.4	1140	741	65	363
Acetonitrile	367.9	218.2	11	207.2	291	164	115	141
Cyclo Hexane	105.6	75.8	0	75.8	82	59	88	39
Ethyl Acetate	2328.5	1710.8	0	1710.8	2096	1540	69	793
Ethanol	59.1	36.1	0	36.1	47	29	71	15
IPA	2037.7	1290.5	10	1280.5	1600	1005	88	663
MDC	953.6	776.1	0	776.1	1264	1029	43	332
Methanol	929.4	512.1	0	512.1	736	406	27	82
Methanol+Acetone	336.1	227.3	0	227.3	266	180	27	36
MTBE	150.6	89.5	0	89.5	111	66	124	62
n-Heptane	132.3	76.8	**0**	76.8	90	52	150	59
TEA	52.4	40.5	0	40.5	51	39	140	41
	1419							

LS-3 SRS COLUMN MONTHLY OUTPUT DATA & TARGET (2025-2026)

LS-3 SRS COLUMN RECOVERY FROM APR-24 To JAN-25												
UNIT	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Total Qty. (KL)	2025-2026 Target (KL)
LS-3	610.9	539	574.3	471.6	563.13	468.3	451.9	265	203.7	465.5	4613	10000
LS-2	192.4	121	128.1	258.4	179.97	69.5	243.1	253.2	214.5	288	1948	3500
Other Units	0	0	0	16.5	8.3	67.3	55	88.4	86.2	99.3	421	1000
TOTAL OUTPUT	803.3	660	702.4	746.5	751.4	605.1	750	606.6	504.4	852.8	6983	14500

LS-3 SRS RECOVERY PERCENTAGE TREND

Solvent Name	Stage	2023	2024	2025 (Target)
Methanol	AMHA1	60	**64.01**	**68**
Acetone	CGBH2	71	**74.83**	**78**
Acetone	VGPT2	70		**76**
Acetone	DGT1	68	**73.78**	**78**
Ethyl Acetate	RSC2B	68	**72**	**90**
Ethyl Acetate	LDC1		**87**	**90**
Ethyl Acetate	DGT1		**76**	**80**
Acetonitrile	ATSC2	59	**64.44**	**68**
Cyclohexane	CTPS	80		**86**
IPA	ATSC1	62	**64.66**	**68**
IPA	ATSC2	66	**69.42**	**73**
IPA	CGBH1	65	**68.43**	**71**
IPA	VIGB2	73	**76.58**	**79**
IPA	RSC2B	54	**63**	**65**
IPA	STPM3	71		**75**
IPA	VGPT2	56	**58**	**60**
IPA	OSM		**51**	**55**
IPA	PBLN		**68.43**	**71**
MDC	OSM3	75	**78.4**	**85**
MDC	VGPT2	82	**85.19**	**88**
MDC	DGT1	80	**90.11**	**95**
MDC	DEM3		**84**	**88**
Toluene	CGBH1		**75.6**	**78**
Toluene	LDC1		**82**	**85**
AVERAGE		**68**	**73**	**77**

LS-3 SOLVENT CONSUMPTION DETAILS (APR-24 to JAN-25)

LS-3 Solvent Consumption, Process recovery & spent sales from all api units(in KL)

Month	Fresh		RFS		TOTAL	Process Output		Spent Sales		Remarks
	Qty(KL)	%	Qty(KL)	%	Qty. (KL)	Qty. (KL)	%	Qty. (KL)	%	
Apr'24	456	40	693	60	1148	550	48	263	22.91	
May'24	757	46	896	54	1652	1462	88	157	9.50	
Jun'24	682	46	806	54	1488	1201	81	227	15.26	
July'24	816	42	1113	58	1929	1517	79	213	11.04	
Aug'24	795	45	957	55	1752	1317	75	142	8.11	
Sep'24	968	47	1095	53	2063	1658	80	135	6.54	
Oct'24	728	50	742	50	1470	879	60	199	13.54	
Nov'24	660	48	704	52	1364	1016	74	177	12.98	
Dec'24	536	58	390	42	926	614	66	234	25.27	
Jan'25	619	50	750	55	1369	1025	75	228	16.68	
Total	**7017**	**47**	**8146**	**53**	**15161**	**11239**	**73**	**1975**	**14**	

Solvent consumption in January-25(in KL)

S.No.	Name of the solvent	Density	Fresh	RFS	TOTAL
1	Acetone	0.785	47	40	86
2	Ethyl Acetate	0.900	116	267	273
3	Methanol	0.792	195	23	218
4	Methylene Chloride	1.326	107	79	158
5	Toluene	0.867	46	164	209
6	IPA	0.785	52	72	125
	Total		**562**	**645**	**1207**

Consumption in Jan'25	Qty. (KL)	%
Fresh Consumption	619	**45**
Process distillate Consumption(Reactor distilled)	1025	
RFS Consumption (IH)	750	**55**
Total	**1369**	

PRODUCT WISE MAJOR SOLVENTS CONSUMPTION DETAILS

LS-3 Ethyl Acetate consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty.(L) Fresh	RFS	Total	Total Qty. / Product	Action Plan/ Target
Ethyl Acetate	Rosuvastatin	RSC2B	34600	56145	90745	301169	
		RSC2B Crop	8400	4200	12600		
		RSC2B Crude Crop PART-A	7920	97024	104944		
		RSC2B Crude Crop	18045	74835	92880		
		PART-B RVBC2	149	0	149		
	Clopidogrel	CGBH1	27563	23550	51113	51113	
	Pregabalin	AMHA2	2311	11449	13760	13760	
	Carbidopa	CRDP3	287.5	0	288	288	
	Famotidine	FMTN2	15285	0	15285	15285	

LS-3 Toluene consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty.(L) Fresh	RFS	Total	Total Qty. / Product	Action Plan/ Target
Toluene	Atorvastatin	ATSC3	2005	11705	13710	13710	
	Clopidogrel	CTPS1	3600	21600	25200	78156	
		CGBH1	4000	48956	52956		
	Pregabalin	AMHA1		2200	2200	78000	
		AMHA12C S-811		13000	13000		
		AMHA2		59200	59200		
	Flecainide	AMHA3	987.5	2612	3600	18500	
		FNDA1	975	4225	5200		
		FNDA2	13300		13300		
	Romidepsin	RDPC4	300	140	440	740	
		RDPC	300		300		

PRODUCT WISE MAJOR SOLVENTS CONSUMPTION DETAILS

LS-3 MDC consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty. (L) Fresh	RFS	Total	Total Qty. / Product	Action plan/ Target
MDC	Clopidogrel	COPB1	10080	28750	38830	87055	
		COPB12C	5050	0	5050		
		CGBH1	11750	31425	43175		
	Levetiracitam	LVTM2	33200	18600	51800	51800	
	Romidepsin	RDPC3	1800	0	1800	8100	
		RDPC4	600	250	850		
		RDPC5	400	0	400		
		RDPC6	5050	0	5050		
	Sitagliptin	STPH1	38100	0	38100	38100	
	Carbidopa	CRDP2	300	0	300	300	
	Sparsentan	SPAN2	350	0	350	350	
	Usage %		**57**	**43**			

LS-3 IPA consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty. (L) Fresh	RFS	Total	Total Qty. / Product	Action Plan/ Target
IPA	Atorvastatin	ATSC2	1920	450	2370	2370	
	Clopidogrel	CGBH1	25175	19785	44960	44960	
	Rosuvastatin	RSC2B	4200	4600	8800	10116	
		RSC2B Crop	816	0	816		
		RSC2B Crude Crop PART-A	500	0	500		
	Pregabalin	PBLN4	17889	47400	65289	65289	
	Famotidine	FMTN1	1375	0	1375	1375	
	Maribavir	MAVR1	100	0	100	100	

PRODUCT WISE MAJOR SOLVENTS CONSUMPTION DETAILS

LS-3 Acetone consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty.(L) Fresh	RFS	Total	Total Qty. / Product	Action Plan/Target
Acetone	Clopidogrel	COPB1	6642	12571	19213	65893	
		COPB12C	2690	0	2690		
		CGBH2	16950	27040	43990		
	Famotidine	FMTN1	686	0	686	686	
	Levetiracitam	LVTM2	14650	0	14650	14650	
	Romidepsin	RDPC6	2450	0	2450	2450	
	Rosuvastatin	RSC2B Crude P-B	200	0	200	2483	
		RSC2B Crop	2282.3	0	2282.3		
		RVBC2	34	46	80		

LS-3 Methanol consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty.(L) Fresh	RFS	Total	Total Qty / Product	Action Plan/ Target
Methanol	Clopidogrel	COPB1	55492	20641	76133	95343	
		COPB12C	7050	0	7050		
		CTPS1	1800	0	1800		
		CGBH1	1460	0	1460		
		CGBH2	8900	0	8900		
		AMHA1	900	750	1650		

LS-3 Methanol consumption in JAN-25

Solvent name	Product name	stage code	consumption Qty.(L) Fresh	RFS	Total	Total Qty. / Product	Action Plan/Target
Methanol	Atogepant	AOGT4	800	0	800	800	
	Atorvastatin	ATSC1	200	0	200	12170	
		ATSC2	2750	0	2750		
		ATSC3	9220	0	9220		
	Cannabidiol	CNBD3 P-A	300	0	300	900	
		CNBD3 P-B	600	0	600		
	Carbidopa	CRDP2	1500	0	1500	2400	
		CRDP3	900	0	900		
	Famotidine	FMTN1	438	0	438	17392	
		FMTN2	16954	0	16954		
	Flecainide	FNDA1	4163	0	4163	4363	
		FNDA2	200	0	200		
	Gadobutrol	GDBL2	2930	0	2930	2930	
	Levetiracitam	LVTM2	2500	0	2500	2500	
	Maribavir	MBIR2	500	0	500	500	
	Medetomidine	MEDT2	50	0	50	4410	
		MEDT3	4,000	0	4000		
		MEDT4	360	0	360		
	Romidepsin	RDPC3	3400	0	3400	10420	
		RDPC4	420	0	420		
		RDPC5	400	0	400		
		RDPC6	6200	0	6200		
	Rosuvastatin	RSC2B	850	0	850	4230	
		RSC2B Crop	300	0	300		
		RVBC2	150	0	150		
		RSC2B Crude	1800	0	1800		
		RSC2B Crude	1130	0	1130		
	Sitagliptin	STPH1	29350	0	29350	29350	

JOB WORK PENDING QUANTITY FROM VENDOR

Job Work Pending Qty. from vendors more than 90 days			Jan-25 Received Qty. (L)- (Analysis was not meeting the specification limit)
Vendor	**Name of the solvent**	**Qty.**	
Zen	Toluene	3023	--
	IPA	4089	**16445**
	THF	4658	**--**
	IPA	2210	**--**
	CHN/MIBK/EA/ Pet.ether	--	**11313**
Total Qty. (Lt.)		**13980**	**27758**

UNPROCESS RECEIVED Quantity FROM ZEN DISTILLATION (Not meeting the Specification Limit)

Received Unprocessed solvent from vendors due to unable to separate

S. No.	Name of the Unit	Name of the Vendor	Name of the Spent Solvent	M Code	Date	Received Qty. (Lt.)	Received Unprocessed solvent analysis data																	
							pH	MC	S-801	S-822	S-805	S-806	S-810	S-811	S-836	S-804	S-807	S-821	S-830	S-819	S-820	S-831	S-832	S-824	S-827	S-808	Others
1			IPA (atrvashan)-atsv1	S-806D																							
2			IPA (atrvashan)-atsv1	S-806D	09.01.25	16445																					
3			osc (IPA)	S-806D			4.97	0.28	3.15	3.63		70.2		0.71	1.1	18.3		1.7			1.26						
4			RLNZ1		01.01.19	6890																					
5	LS-3	ZEN	Recovery Cyclohexane	S-836D	08.01.19	4423																					
					25.12.24	343	5.6	0				0.35		14	47		3.25					27		5.26			
6			Ethyle acetate(Rosuvastatin)-b	S-811D	19.06.23	10416																					
					25.12.24	3525	4.92	2.7	0.19	7.2	12.9	6.3	0.48	41.8				12.1				9.43	5.75				
7			pet ether	S-808D	25.12.24	4418	3.59	1.1	2.5	0.32	0.68		0.53	18.8	0.35	4.8	10.7	2.05				0.36	14.2	39.2		5.1		
8			RLNZ1 distilled MIBK	S-827D	25.12.24	1644	5.54	0.96						0.21											90.2		9
					25.12.24	1449	6.72	12.7	1.38	0.51	12.4	33.8	38	5.56		2.3		2.91			3.1						
						49553																					

LS-3 RECOVERY SOLVENTS USAGE DETAILS

Product	Stage code	Solvent name	Usage / Batch			Recovery Usage %	Target Recovery Usage %	Remarks
			Fresh	Recovery	Total			
Atorvastatin	ATSC1	Cyclohexane	1800	4200	6000	70		Nutch filter /workup/Plant Distillation
		IPA	3200	3200	6400	50	55	Water media /CF/Plant /Column distillation using with 10% MC
	ATSC2	Acetonitrile	1750	1750	3500	50	53	CF/Plant /Column distillation using with 10% MC
		IPA	1750	1750	3500	50	55	CF/Plant /Column distillation using with 10% MC
	ATSC3	Toluene	500	3700	4200	88		workup /Plant distillation
Pregabalin	AMHA1	Toluene	400	4000	4400	91		Workup / Plant distillation
		Methanol	1800	1500	3300	45		Reaction consumption 600 lts / Plant / Column
	AMHA2	Toluene	400	7000	7400	95		Workup / Plant distillation
		Ammonia	2400	7400	9800	76		Work up/Plant distillation
		Ethylacetate	400	1400	1800	78		workup / CF/Plant distillation
	AMHA3	Toluene	100	700	800	88		workup /Plant distillation
		Methanol	3000	2700	5700	50		Water media/ANFD/Plant distillation
		MDC	800	2700	3500	77		Workup/Plant distillation
Clopidogril	COPB1	Methanol	4100	4100	8200	50	55	Methanol+Acetone Mixed solvent
		Acetone	350	730	1080	68		Experiments going on with single solvent
	CTPS1	Toluene	200	1600	1800	89		Workup/plant distillation
		Cyclohexane	400	1800	2200	82	85	ANFD / Plant distillation
		MDC	800	1200	2000	60		Workup/Plant distillation
	CGBS1	IPA	1200	1485	2685	55		Water media/CF/Plant disti / Column dist
		Toluene	800	3850	4650	83		Water media/CF-2 times /Plant disti / Column dist
		Ethylacetate	1400	2100	3500	60		workup / CF/Plant distillation
	CGBS2	Cyclohexane	700	1800	2500	72	80	work up / plant Distillation
		Acetone	1550	1550	3100	50	55	workup / CF/Plant disti / Column distillation
Rosuvastatin	RSC2B	IPA	1200	900	2100	43		Water media /Plant / Column distillation
		Ethylacetate	4300	8300	12600	66	70	CF/Plant / Column distillation
		Toluene	825	800	1625	49		Work up / plant distillation / Column distillation -
Flicanideacetate	FNDA1	n-heptane	2600	2600	5200	50		Toluene+n-Heptane Mixed solvent

SOLVENT USAGE REDUCTION (2024-2025)

Product	Stage Code	Solvent name	Existing Qty. (L)	Reduced Qty. (L)	Usage Variance (L)	Usage % of Reduction	Month of reduction	Remarks
Clopidogrel	COPB1	MDC	3500	2700	800	22.86	Nov'24	One Extraction removed, by checking aqueous layer Product content as Nil.
	CTPS1	Toluene	1800	1400	400	22.22	Nov'24	
	CGBH1	MDC	2000	1600	400	20	Nov'24	
		Toluene	2600	2100	500	19.23	Apr - Dec'24	Monthly 50 lts reduced, taken 9 months to finalize (Methanol + Toluene)
		Methanol	80	40	40	50	Nov'24	
	CGBH2	Cyclohexane	2500	2000	500	20	Nov'24	One Extraction removed, by checking aqueous layer Product content as Nil.
Flicanideacetate	FNDA1	Toluene	1625	625	1000	61.54	Sep'24	Extracting from Mixed solvent (Toluene+Heptane)
		n-Heptane	5200	2600	2600	50	Sep'24	Experiments conducted for direct 2000 lts n-Heptane usage reduction- Ok - waiting for clearance
Oseltamivir	OSM	Triethylamine	790	330	460	58.23	Jun-23 - Jun'24	70 Kl recovery stock available(Value-1.2 Cr) Presently product running in Phrmachem
		Ethanol	1200	200	1000	83.33	Jun'24	Ethanol recovery contains Ethanol 91% & Ethanol recovery contains Ethanol 91% &
Raw material(M-274)		Diethylketone	402	301	101	25.12	Jun'24	(Value-1.9 Cr) - Presently product running in Phrmachem
								ANFD washings Experiments going on

COLUMN INPUT/OUTPUT SOLVENT STOCK on 15/02/2025

To be used Refurbished(Column distilled) solvents stock as on 15/02/2025

S.No.	Name of the solvent	M-Code	Volume in Liters	GC	MC	ph
1	Methanol	S-801 D	10000	99.5	0.16	6.85
2	Toluene	S-804 D	16000	99.7	0.05	7.02
3	Acetone	S-805 D	40000	99.5	0.18	7.65
4	IPA	S-806 D	60000	99.6	10.20	6.91
5	MDC	S-807 D	7000	99.7	0.20	6.85
6	Acetonitrile	S-810 D	14000	99.5	11.20	7.05
7	Ethyl Acetate	S-811 D	20000	99.6	0.20	7.8
8	Ethanol	S-822 D	14000	93.1	0.30	7.65
9	N-Heptane	S-831 D	14000	99.6	0.05	7.75
10	Cyclohexane	S-836 D	800	99.4	0.08	8.01
11	TEA	M-440	28000	99.7	0.10	8.25

To be distilled solvents stock for in-house or Job work as on 15/02/2025

S.No.	Name of the solvent	M-Code	Volume in Liters	GC	MC	ph
1	Methanol	S-801 D	100000	90	10	6.8
2	Toluene	S-804 D	65000	90	8	7.9
3	Acetone	S-805 D	55000	92	15	7.9
4	IPA	S-806 D	300000	91	20	8.1
5	MDC	S-807 D	60000	85	6	7.6
7	Acetonitrile	S-810 D	40000	90	30	8.4
8	Ethyl Acetate	S-811 D	60000	95	5	7.9
9	n-butanol	S-816 D	20000	98	1	8
10	Ethanol	S-822 D	210000	88	4	7.9
11	N-Heptane	S-831 D	75000	70	2	8.2
12	MTBE	S-832	90000	80	5	6.8

LS-3 SRS JAN-2025 COLUMN INPUT & OUTPUT DETAILS

Jan-25 LS-3 SRS Column Recovery %			
Column Status	**KL**	**Recovery %**	**Target (Recovery %)**
Column Input	1209		
Recovery	858.3	71	**74**
Sale Fraction	169.2	14	**12**
Water	15.7	1.3	**1.3**
Distillation Loss	24.18	2	**1.7**
Spent for ETP (water media)	141.4	11.7	**11**

KEY POINTS FOR DISCUSSION

S. No.	Key point	Actions
1	Recovered Solvent Usage	• Rosuvastatain IPA Recovery usage established in this year with 96.5% purity and taking concurrence from LS3. • Used 267 KL in batches , as per earlier IPA not used , earlier sold out as mixed spent. 2.67 cros cost saved. • Rosuvastatain Ethyl Acetate column distilled fractions selling outside , by taking initiation 60% recovery taken from selling fractions, taking concurance from LS3. • Current usage is 65%, we will have increased by 10%. (Rosuvastatin Calcium, Atrovastatin Calcium, Clopidogrel bisuphate, Pregabalin, FNDA) used in Intermediate stages. • Rosuvastatin Ethyl Acetate Fraction quantities completely recovered, Pregabalin Methnaol+Toluene fractions recycled, Toluene and Methanol recovery % increased. Atrovastatin IPA Fraction-1 accumulated solvent Column distilled. •Famotidine, Meditomodine, Atogepant, Vonoprazan & Doxpin – We will try to use recovery solvents(glass Column trials completed), it is under process in R&D.
2	Spent solvent sale & solvent losses reduction	Spent solvent sale to be reduction by 2% (Current sale is 14%) & Solvent losses reduction by 3% (Current loss is 22%)

KEY POINTS FOR DISCUSSION

S. No.	Key point	Actions
3	Internal units Mixture of Solvents Recovery	LS-3 total Solvents In-house Recovery only (We didn't send to any job work from our end) We recovered Internal Units spent solvent in Column Distillation LS-2: Solvents MDC, IPA, Acetone, MTBE, Toluene, Methanol, Acetonitrile+Water Column Distilled in LS-3. Triple mixture solvent Cyclohexane+Toluene+MTBE+Unknown previously considered as mixed solvent and sent for sale purpose, Pharma Chem: Solvents Methanol, MDC MLPL-2:Solvents MTBE+Toluene MSN Organics: Solvents Methanol+Toluene+Water, Acetone+Water, IPA+Methanol+CHN+EA+Toluene,Acetonitrile+Ethyl Acetate,Methnaol+Tolune+Acetone LS-4: n-Heptane solvents received for Column Distillation. Enal drugs-2: IPA+Water Enal drugs-1: Methanol, Acetone LS-I: MTBE+Methanol, Acetone+Methanol, n-Heptane+IPA+Toluene+Cyclohexane, MDC+Methanol Maithri Labs: Toluene+MTBE, IPA & Acetone Oncology: Methanol+MTBE+THF

LS-3 SRS DOCUMENTATION STATUS

Column	Document Status	Time line/Action plan
Column-1	OQ Completed	Ready to plan Trial & Validation Batches
Column-2	Pregabalin PBLN1 Methanol Validation & Commercial Completed.	Completed on 14.01.2025
Column-3	Rosuvastatain Calcium RVST1 Ethyl Acetate trial batch completed and Validation Documents is under process.	18.02.2025
Column-4	OQ Completed.	Ready to plan Trial & Validation Batches

LS-3 SRS PROJECT WORK STATUS

- Condensers & Receivers placed in respective position in SRS.
- Storage Tanks placed at SRS tank farm area.
- 600TR New Cooling tower installed in SRS and lines fabrication work is under process.
- 750mm dia Columns (2 No’s) is under erection & Commissioning.

THANK YOU